Implementing the Central Valley Flood Protection Plan

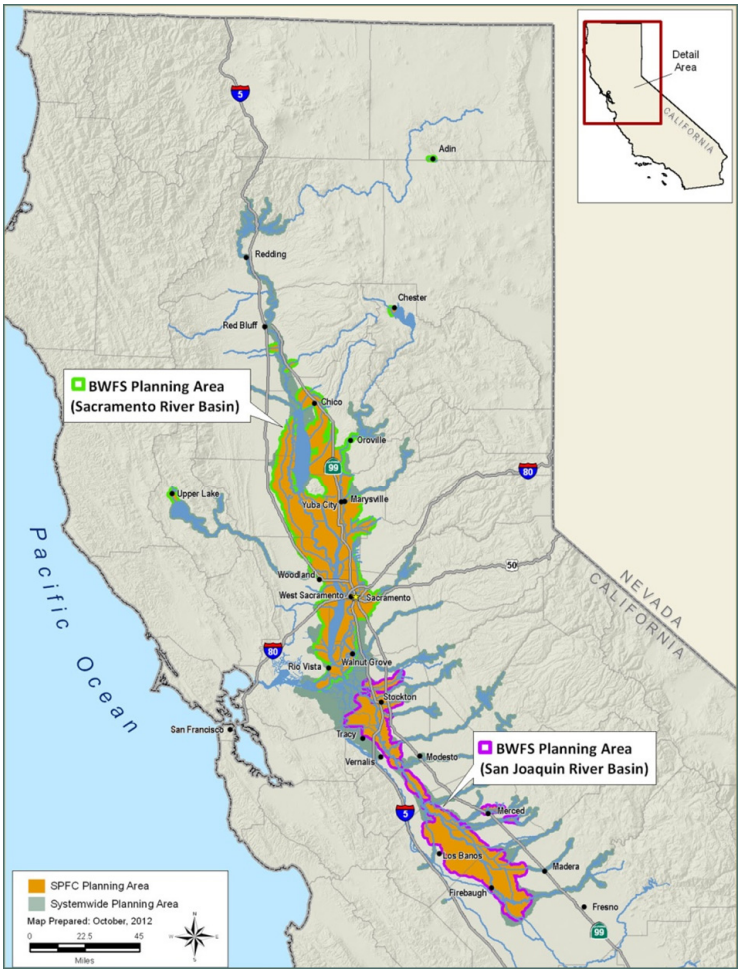
State-Led Basin-Wide Feasibility Studies

The 2012 Central Valley Flood Protection Plan recommends a State Systemwide Investment Approach for flood risk management in the Central Valley. The California Department of Water Resources has initiated Basin-Wide Feasibility Studies, along with associated Regional Flood Management Planning and the Central Valley Flood System Conservation Strategy, to advance both ongoing and long-term implementation of the State Systemwide Investment Approach.

The State Systemwide Investment Approach (SSIA), broadly described in the 2012 Central Valley Flood Protection Plan, includes two primary types of physical actions: (1) ***regional improvements*** address local and regional flood management needs; and (2) ***system improvements*** are large-scale State Plan of Flood Control (SPFC) improvements that provide cross-regional benefits and improve overall flood system function, flexibility, and resiliency. Two State-led Basin-Wide Feasibility Studies, one in the Sacramento River Basin and one in the San Joaquin River Basin, will refine the scope, scale, and location of these physical features, in close coordination with development of the Central Valley Flood System Conservation Strategy.

Scheduled to be completed by mid-2016, the Department of Water Resources (DWR) anticipates accomplishing the following through Basin-Wide Feasibility Studies:

- Refine the scale and location of major SSIA system improvements for flood management within the State Plan of Flood Control.
- Assess State interest in regional flood management improvements identified in regional plans.
- Integrate systemwide environmental conservation with SSIA flood system improvements, including potential mitigation needs and restoration opportunities.
- Identify elements of the SSIA that can be further developed, in an efficient and timely manner, in ongoing federal cost-share feasibility studies.
- Identify elements of the SSIA that should be incorporated into new federal cost-share feasibility studies.
- Inform the 2017 update of the Central Valley Flood Protection Plan and FloodSAFE Financing Plan by:
  - Establishing a framework for evaluating multi-objective project benefits, identifying beneficiaries, and allocating costs on a systemwide scale.



  - Refining the magnitude and types of State investments needed in each basin.
  - Identifying implementation considerations for system improvements, including project sequencing and State priorities.

Integration with Parallel Efforts

The Basin-Wide Feasibility Studies will incorporate findings and data from many ongoing DWR efforts. The Conservation Strategy will provide the systemwide context for improving environmental conditions and trends throughout the flood management system as a whole, reducing compensatory mitigation needs for individual projects and developing efficient permitting strategies for

CVFPP implementation. DWR plans to actively engage locally-led Regional Flood Management Planning efforts to ensure that information developed through systemwide planning is available for regional plan development. Similar feedback from regional flood management planning efforts will provide local perspectives and inform the analysis of systemwide flood management and conservation elements.

Flexible, Resilient, and Sustainable Flood Management

*Flood system **flexibility** is the ability of the flood management system to adapt to changing conditions, such as changing hydrologic, social, political, regulatory, or ecologic conditions.*

*Flood system **resiliency** is the ability of the flood management system to continue to provide benefits and recover quickly after damaging floods.*

*Flood system **sustainability** refers to a system that is socially, environmentally, and financially sustainable for an enduring period.*

Approach

Each Basin-Wide Feasibility Study will progress independently through two phases.

- **Phase 1** will focus on developing objectives and exploring different physical configurations and scales for system improvements, such as bypass modifications and operational changes. A short-list of promising configurations will be identified for further analysis.
- **Phase 2** will consist of evaluating and comparing the physical improvement components of the SSIA on a systemwide scale, considering their costs, effects, and benefits. Systemwide analysis tools will be used to assess hydrologic and hydraulic effects and associated, economic, life safety, environmental, and other benefits. This evaluation will support selection of a State preferred option in each basin. Findings and recommendations will be documented in two reports, one for each basin.

The Basin-Wide Feasibility Studies will continue to focus on the facilities of and lands receiving protection from the SPFC. Technical analyses will consider benefits to public safety, flood damage reduction, ecosystem functions, and a range of other integrated water management benefits, with an end goal of identifying beneficiaries and cost sharing partners. Subsequent work, outside the basin studies, will be required to develop project-specific designs, approvals, and environmental review sufficient for construction.

Communications and Engagement

DWR will engage stakeholders early and often in development of the Basin-Wide Feasibility Studies and Conservation Strategy. Communications and engagement will seek to facilitate broad understanding of the roles and joint responsibilities of State, federal, and local agencies in implementing the CVFPP, while providing transparency in State decision making. DWR will maintain a flexible communications and engagement framework that leverages the use of existing stakeholder forums, and recognizes the diverse interests of and significant variation in stakeholders.

For more information, visit www.water.ca.gov/cvfmp